

REMARKS

Claims 17, 18, 21, 22, 25, 26, 28, and 31 are pending in the application. Claims 1-16, 19, 20, 23, 24, 27, 29, and 30 have been canceled. Applicant has amended claim 17. No new matter is introduced by these amendments. See, e.g., “outside” (Specification paragraph [0011] line 2, paragraph [0025] lines 2-4, FIGS. 1 and 2); “transverse guide (11)” (Fig. 1); and “directly” (Specification paragraphs [0006]-[0007], [0023]-[0024], and [0026]).

Rejections under 35 U.S.C. § 112

The Examiner rejected claims 17, 18, 21, 22, 25, 26, 28, and 31 under 35 U.S.C. § 112 second paragraph as allegedly indefinite. Specifically, the Examiner alleged:

- (1) the phraseology “in front of” in claim 17, line 8 was vague.
- (2) The terminology “transverse” in claim 17, line 10 was vague.
- (3) The recitation in claim 17, line 11 of “at least one fork arranged in a mount ... to move with ... two degrees of freedom” is unclear.

Regarding the “in front of” phraseology, Applicant respectfully submits that amended claim 17 overcomes the § 112 rejection. Applicant, in an after-final-amendment dated October 13, 2006, proposed amending claim 17 to recite “outside of” instead of “in front of.” In the Advisory Action dated October 24, 2006, the Examiner stated, “Applicant’s reply has overcome the following rejection(s): Changing “in front” to “outside” in claim 1[7] overcomes that portion of the 112/2 rejection.”¹ [p. 2]. However, despite acknowledging the propriety of the amendment, the Examiner declined to enter the amendment. Applicant respectfully requests entry of the amendment to claim 17.

¹ Applicant submits that the recitation of “claim 1” instead of “claim 17” was a typographical error because (1) claim 1 was canceled in the Preliminary Amendment dated May 15, 2002, (2) the only claim pending at that time that included the phrase “in front of” was claim 17, and (3) Applicant proposed amending claim 17 to replace “in front” with “outside” in the immediately preceding amendment.

Therefore, Applicant submits that amended claim 17 overcomes the § 112 rejection and requests withdrawal of the rejection.

Regarding the terminology “transverse,” Applicant notes that “transverse guide” refers to transverse guide (11), which has been adequately defined in the specification and identified in the figures. (See e.g., Specification [0011] paragraph line 2, [0025] paragraph lines 2-4, FIGS. 1 and 2, etc.). FIG. 1, for example, shows guide 11 is transverse (i.e., transverse: lying or extending across) the wafer processing vacuum chamber.

Applicant has amended claim 17 to recite “transverse guide (11)” to better clarify the claimed subject matter. No new matter is introduced at least in view of the citations to the specification and drawings above. Accordingly, Applicant submits that amended claim 17 overcomes the § 112 rejection and requests withdrawal of the rejection thereto.

Regarding the recitation “at least one fork arranged in a mount ... to move with ... two degrees of freedom,” the Examiner stated in the Examiner’s Answer dated March 25, 2008, “[a]ppellant’s arguments with respect to the terminology “two degrees of freedom” are persuasive and that portion of the 112/2d par. rejection is withdrawn.” Examiner’s Answer, p. [6].

Accordingly, amended claim 17 and claims 18, 21, 22, 25, 26, 28, and 31 overcome the § 112 rejections. Applicant respectfully requests prompt allowance of the claims.

Rejections Under 35 U.S.C. § 103

The Examiner rejected claims 17, 18, 21, 22, 25, 26, 28, and 31 under 35 U.S.C. § 103(a) as unpatentable over Yonemizu et al., U.S. Patent No. 5,958,145 (“Yonemizu”), in view of Parodi et al., U.S. Patent No. 5,651,823 (“Parodi”) and Soraoka et al., U.S. Patent No. 5,855,726 (“Soraoka”).

Applicant submits that neither *Yonemizu*, *Parodi*, nor *Soraoka*, taken alone or in combination, teaches or suggests the claimed subject matter.

As amended, claim 17 recites, *inter alia*:

17. (Currently amended) An apparatus for handling wafers, wherein the apparatus is configured to place said wafers from a wafer-holding cassette disposed on a loading station directly into a wafer processing vacuum chamber...

said internal handling device having at least one fork arranged in a mount on said transverse guide to move with at least two degrees of freedom and arranged to interact with said grippers of said external handling device to directly receive a wafer therefrom.

Soraoka describes an external atmospheric loading robot 9, which moves wafers in and out of intermediary loading stations (load locks) 4 and 5. Internal handling device 10 picks up wafers from loading station 4 for vacuum processing and drops off wafers at loading station 5 after vacuum processing. (See e.g., *Soraoka*, Fig. 2, col. 5 line 62 - col. 6 line 23, etc.). In contrast to amended claim 17, *Soraoka* at best describes transferring wafers indirectly into and out of the vacuum chamber, i.e., through intermediate load locks 4, 5.

The Examiner likewise suggests that the cited references fail to teach directly transferring the wafers into and out of the vacuum chamber. In the Examiner Answer dated March 25, 2008, the Examiner stated:

The atmospheric (external) robot 9 transfers wafers into the load locks and thus, into the vacuum chamber. Nothing in the claim requires the external handling robot to *directly* transfer a wafer into the vacuum processing chamber in a manner that *precludes intermediary load locks*.

[p. 7] (emphasis added).

Accordingly, Applicant submits that the cited references, either taken alone or in combination, fail to teach or suggest the claimed subject matter as recited in amended claim 17,

and therefore amended claim 17 defines over the cited art. Claims 18, 21, 22, 25, 26, 28, and 31 also define over the cited art at least because of their dependence from independent claim 17.

Applicants respectfully request withdrawal of the rejections to claim 17 and its dependent claims and prompt allowance of the claims.

Objections Under 35 U.S.C. § 132.

The amendment to the specification filed December 21, 2005 is objected to under 35 U.S.C. 132(a) because the Examiner contends that it introduces new matter.

Applicant, for brevity herein, incorporates by reference the arguments presented in the previous Replies to support the amended language “about a linear axis (e.g., substantially parallel to the rails)” in ¶ [0021] of the specification.

Here, applicant notes that irrespective of whether the current MPEP explicitly mandates or does not mandate the previous 37 § C.F.R. 1.84 (k) (iii) (See e.g., cache of <http://www.uspto.gov/web/offices/pac/doc/general/drawing.htm> as retrieved on October 9, 2006, attached), the drawings in the instant application filed on May 20, 2002, which originate from priority International patent application filed July 12, 2000 and German patent application filed July 12, 1999, meet the requirement that “Elements of the same view must be in proportion to each other . . .” Such a drawing requirement follows at least a combination of the current 37 CFR § 1.84, informal rules, and common standards for engineering graphic art drawings.

Applicant again notes that that MPEP 2515 also provides that “the description of the article pictured can be relied on, in combination with the drawings, for what they would reasonably teach one of ordinary skill in the art,” citing *In re Wright*, 569 F.2d 1124, 193 USPQ 332 (CCPA 1977).

In this case, the specification and FIGS. 1 and 2 reasonably teach one of ordinary skill in the art (e.g., in view of the common standards for engineering graphic art drawings) that the cooling plate, heating plate and the loading station for receiving a wafer cassette are disposed one in front of the other “about a linear axis (e.g., substantially parallel to the rails of the internal handling system).”

Further, applicant understands the Examiner’s interpretation to be that the Figures do not necessarily show the claimed linearity, but does not exclude the claimed linearity. Therefore, in applicant’s understanding even under the Examiner’s interpretation, the specification shows the claimed linearity as at least one teaching of the Figures. Thus, the amendment to the specification is not new matter.

In view of the foregoing, applicants respectfully submit that the 35 U.S.C. § 132(a) “new matter” objection is erroneous.

Conclusion

Applicants respectfully submit that this application is now in condition for allowance. Reconsideration and prompt allowance of which are requested

Respectfully submitted,

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